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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,278	07/10/2003	Stephen Varghese Samuel	FGT 1690 PA	2451

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EXAMINER

TRAN, DALENA

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,278

Applicant(s)

SAMUEL ET AL.

Examiner

Dalena Tran

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7,13-19 and 23 is/are rejected.
- 7) ☒ Claim(s) 3-6,8-12 and 20-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/28/03, 3/8/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-23 are pending.
2. The prior art submitted on 8/28/03 and 3/8/04 have been considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2,13,15, and 19, are rejected under 35 U.S.C.102(e) as being anticipated by Madau et al. (6,314,329).

As per claim 1, Madau et al. disclose a sensor offset correction method for a vehicle comprising: generating a first offset correction signal for a vehicle dynamic sensor at a sensor power up (see at least the abstract lines 4-15), generating a second offset correction signal for a vehicle dynamic sensor when the vehicle is moving, and correcting vehicle dynamic sensor in response to at least one of first offset correction signal and second offset correction signal (see at least column 1, lines 35-55).

As per claim 2, Madau et al. disclose generating a third offset correction signal for a vehicle dynamic sensor when the vehicle is at rest, and correcting vehicle dynamic sensor in response to third offset correction signal (see at least the abstract, lines 15-21; and columns 3-4, lines 38-18).

Art Unit: 3661

As per claim 13, Madau et al. disclose initializing sensor, and substantially eliminating D.C. bias present at initialization of sensor (see at least column 3, lines 20-37).

As per claim 15, Madau et al. disclose in response to the vehicle moving prior to completion of initialization, averaging offset values previously acquired and using them as first offset correction signal (see at least column 1, lines 35-55).

As per claim 19, Madau et al. disclose a sensor offset correction method for a vehicle comprising: generating a first offset correction signal for a vehicle dynamic sensor at a sensor power up in response to a DC bias (see at least the abstract, lines 4-15; and columns 2-3, lines 64-13), generating a temperature drift signal for sensor (see at least column 2, lines 31-38), generating a second offset correction signal for a vehicle dynamic sensor when the vehicle is moving in response to temperature drift signal (see at least column 1, lines 35-55), generating a third offset correction signal for a vehicle dynamic sensor when the vehicle is at rest and vehicle dynamic sensor is below an accuracy threshold (see at least column 2, lines 52-63), and correcting vehicle dynamic sensor in response to first offset correction signal, second offset correction signal and third offset correction signal (see at least columns 3-4, lines 20-18).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, and 17-18, are rejected under 35 U.S.C.103(a) as being unpatentable over Madau et al. (6,314,329) in view of Schiffmann (6,038,495).

Art Unit: 3661

As per claim 7, Madau et al. disclose generating a filtered yaw rate of zero (see at least the abstract, lines 1-4). Madau et al. do not disclose generating a filtered roll rate of zero. However, Schiffmann discloses generating a filtered roll rate of zero (see at least columns 5-6, lines 55-3; and column 6, lines 43-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Madau et al. by combining generating a filtered roll rate of zero to prevent vehicle rollover condition.

Also, as per claims 17-18, Schiffmann discloses compensating for a valid signal bias in vehicle dynamic sensor, wherein compensating for valid signal bias comprises adjusting an electrical long terms bias over time with a minute adjustment at each sampling time or a sliding mode control (see at least columns 6-7, lines 42-59).

7. Claims 14, and 16, are rejected under 35 U.S.C.103(a) as being unpatentable over Madau et al. (6,314,329), in view of Schiffmann (6,038,495), and Winner et al. (6,704,631).

As per claim 14, Madau et al. do not disclose resultant filtered roll rate is approximately zero. However, Schiffmann discloses generating first offset correction signal such that a resultant filtered roll rate is approximately zero (see at least columns 5-6, lines 55-3; column 6, lines 42-65; and column 9, lines 11-40). Madau et al. also do not disclose resultant filtered yaw rate is approximately zero disclose. However, Winner et al. disclose generating first offset correction signal such that a resultant filtered yaw rate is approximately zero (see at least column 7, lines 3-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Madau et al. by combining generating first offset correction signal such that a resultant filtered roll rate, and a resultant filtered yaw rate is approximately zero for accurately determining a corrected offset value.

Art Unit: 3661

Also, as per claim 16, Winner et al. disclose generating first offset approximately equal to a previously stored sensor signal from a previous driving cycle (see at least columns 2-3, lines 33-2).

8. Claims 3-6,8-12, and 20-22, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Burgdorf et al. (US 2003/0109939 A1)

. Lohrenz et al. (5,719,790)

. Lee (6,360,147)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Dalena Tran

A handwritten signature in black ink, appearing to read 'Dalena Tran', with a stylized flourish at the end.

December 17, 2004